

and the middle acetabula and coxæ, and, in the apterous forms, the shape of the metaphragma, offer good specific characters in many *Gerridæ*, although they have not hitherto been used as such by the students of this group.

In some apterous *Gerridæ* there is a remarkable dimorphism in the structure of the mesonotum. In the same species it is possible to find two apterous forms, both with well-developed genitalia: one with the pronotum more or less fused with the mesonotum and prolonged backwards in a broadly rounded process, reaching the metanotum, but with the apical margin free, at a somewhat higher level than the metanotum, quite as in the winged form; the other with the mesonotum distinctly separated from the pronotum, and the posterior process truncated at the apex, with the postero-lateral margins slightly sinuate, the whole margin of the process closely embracing the adjoining margin of the metanotum. I believe this last form, although capable of copulating, has not undergone its final ecdysis. Without knowledge of this dimorphism, one might easily be induced to describe the two forms as distinct species.

Tammerfors, Finland:

September 26th, 1902.

THREE NEW GENERA OF COCCIDÆ FROM CEYLON.

BY E. ERNEST GREEN, F.E.S., GOVERNMENT ENTOMOLOGIST.

I have been requested to establish the following genera to permit of their inclusion in the "Genera Insectorum" now in course of publication. The species will be described more fully, in their proper place, in the "*Coccidæ* of Ceylon."

ANOMALOCOCCUS, gen. nov.

Fam. ASTEROLECANIINÆ.

Allied to *Lecaniodiaspis*; but female forming no sac or test.

Adult ♀ naked. Anal ring with more than eight hairs. Other characters as in *Lecaniodiaspis*. Antennæ present; legs wanting. Anal orifice surrounded by chitinous plates. Perforate discs on dorsum.

Male puparium similar to that of *Lecaniodiaspis*, with hinged operculum behind.

The single species, at present known, occurs only in nests of an arboreal ant. It is probable that this habitat has led to the suppression of the test usual in the family.

Type: *A. cremastogastris*.

ANOMALOCOCCUS CREMASTOGASTRI, sp. nov.

Adult ♀ naked; thinly dusted with white mealy powder. Highly convex; a strongly marked median longitudinal ridge and two transverse ridges (as in *Lecanium oleæ*). Posterior extremity deeply cleft. Colour olivaceous, covered with a waxy bloom, which gives the insect a general tint of greyish-white. Antenna 8-jointed. No legs. Anal ring with twelve to fourteen stout, flattened hairs. On the dorsum, immediately anterior to the anal orifice, are numerous small perforate discs, not disposed in pairs, but irregularly scattered.

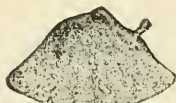


Fig. 1.

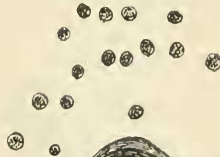


Fig. 1-a.

Long, 3.50 mm.; broad, 3 mm.

Female of 2nd stage with 6-jointed antennae, and spatulate stigmatic spines.

Male puparium oblong, oval, convex, with an indistinct median ridge. Greyish-ochreous. A large hinged operculum at posterior extremity.

Adult ♂ castaneous. Thorax broad and depressed. Wings ample; halteres conspicuous. Genital sheath slender, pointed, about one half the length of abdomen. No caudal setae.

Total length, 1.25 mm.

Hab.: In nests of *Cremastogaster Dohrni*, on *Ficus* sp. Peradeniya, Ceylon.

AMORPHOCOCCUS, gen. nov.

Fam. ASTEROLECANIINÆ.

Insects forming galls. Adult ♀ naked, or partially covered by second pellicle. Antennae rudimentary. Legs wanting. Anal ring setiferous, in a shallow cleft at extremity of a pygidiform process.

Young larvae with conspicuous 8-shaped pores on margin. Anal lobes small.

Type: *A. mesuæ*.

AMORPHOCOCCUS MESUÆ, sp. nov.

Female insect enclosed in a rounded gall, with a median apical aperture. The galls normally hemispherical, but two or more may coalesce to form an irregular mammillate swelling. Cavity of gall conical.

Adult ♀ gamboge-yellow; soft, tumescent; sub-circular, rounded below, slightly concave above; sides slightly indented at the stigmatic regions. A minute



Fig. 2.

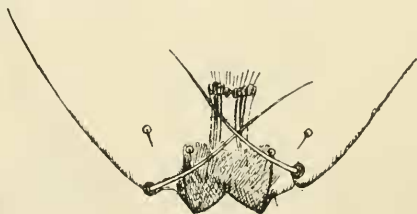


Fig. 2-a.

pygidiform process, bearing the anal aperture, projects upwards from the edge of the dorsal convexity; its extremity with a pair of stoutish setæ, usually reflexed and crossed over the ventral surface. Anal ring with six hairs, concealed in a retractile tube at base of a shallow depression, with chitinous sides. Legs wanting. Antennæ represented by minute nodular tubercles. Spiracles large, surrounded by scattered parastigmatic glands. Derm without other glandular markings. The insect is often partially enveloped in the pellicle of the previous stage, which lines the unoccupied part of the gall cavity, and shelters the eggs.

Diameter, 1.50 to 2 mm.

Male unknown in any stage.

Living insects of 2nd stage not observed.

Young larva oval, flat; pale yellow. Margin with a series of large 8-shaped pores; four similar pores on dorsal surface of thorax. These pores give rise—in the living insect—to stout, curling, glassy filaments. Legs and antennæ normal, the latter with terminal segment somewhat dilated. Anal ring with six hairs. Anal lobes small, each bearing a stoutish seta.

Hab.: On terminal twigs of the "Iron-wood tree" (*Mesua ferrea*). Kandy, Peradeniya, Ceylon.

GEOCOCCUS, gen. nov.

Fam. DACTYLOPIINÆ.

Insects subterranean; forming a more or less complete sac. Limbs present; antennæ close together, as in *Ripersia*; 6-jointed, terminal joint large. Body terminating in a pair of chitinous anal lobes as in *Eriococcus*. Derm with trilocular pores. Anal ring setiferous.

Young larva with a pair of stout chitinous spines.

Type: *G. radicum*.

GEOCOCCUS RADICUM, sp. nov.

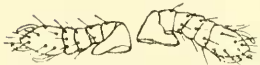


Fig. 3.



Fig. 3-a.

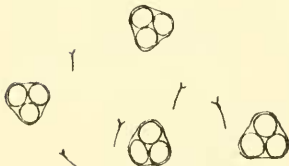


Fig. 3-b.

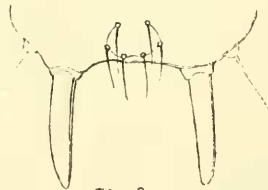


Fig. 3-c.

Adult ♀ forming brittle pulverulent white sacs, attached to roots of grasses. Broadly fusiform, narrowed at both extremities, very pale honey-yellow. Antennæ 6-jointed, their bases

almost contiguous; somewhat clavate, terminal joint largest. Anal lobes densely chitinous, dark coloured, short; a stout,

tooth-like spine at extremity of each, giving it the appearance of being biarticulate. Derm with very large, conspicuous, trilocular pores disposed irregularly.

Length, 1.25 to 1.50 mm.

Hab. : On roots of grasses (and other plants?), usually one or two inches underground. Pundalnoya, Ceylon.

EXPLANATION OF FIGURES.

Fig. 1.—*Anomalococcus cremastogastri*, side view of adult ♀, × 6. 1a.—Ditto, posterior extremity, × 100.

Fig. 2.—*Amorphococcus mesuæ*, section through gall, showing ♀ insect in position, × 6. 2a.—Ditto, posterior extremity of adult ♀, × 433.

Fig. 3.—*Geococcus radicum*, antennæ of adult ♀, × 100. 3a.—Ditto, anal lobes of adult ♀, × 100. 3b.—Ditto, dermal pores, × 433. 3c.—Ditto, posterior extremity of young larva, × 433.

Peradeniya, Ceylon :

September 19th, 1902.

Leucania albipuncta in Suffolk.—It is satisfactory to be able to record a further extension of the range of this comparatively recent immigrant in these islands. A very fine specimen, taken at sugar in his own garden at Hemley, Woodbridge, Suffolk, has been kindly submitted for my information by the Rev. A. P. Waller, Rector of that parish.—CHAS. G. BARRETT, Tremont, Peckham Rye, S.E. : September 20th, 1902.

Xanthia ocellaris at Ipswich.—Whilst Mr. Prout was looking through my small collection of *Lepidoptera* last spring he noticed a specimen of this species which I had placed with *X. gilvago*, thinking it a variety of that moth. I captured the insect at Ipswich on September 12th, 1898, whilst it was at rest on a shop window close to an electric light.—E. C. BEDWELL, 25, Ossian Road, Stroud Green, N. : October, 1902,

Hepialus humuli in the Faerøe Islands.—On July 19th, 1900, between 8 and 10 p.m., I took fifteen specimens (four ♀, eleven ♂) of the Ghost Moth (*Hepialus humuli*) at Klagsvig in the Faerøe Isles. The curious point about these specimens, which are now in the Hope Collection, is that, in spite of the geographical position of their locality, they are intermediate between the typical variety of the species and the variety *hethlandica*. The wings of four of the males are pure white, those of two others are only very slightly tinged, while the remainder are comparable to the palest males in a large series of *hethlandica* from Shetland with which I have compared them in the Hope Department.—NELSON ANNANDALE, Hope Department, University Museum, Oxford : October 6th, 1902.

Variation in Lithosia deplana, Esp. (*depressa*, Esp.).—I have been a good deal interested in reading Mr. Bankes' notes on the above-named species in the October number of the Ent. Mo. Mag. (*antea* p. 229). Curiously, the only two females which I possess (both from Box Hill) are of the unicolorous *sororecula*-like variety, and I had not noticed the disagreement of this form with the published descriptions and figures. I find, however, that it does not seem to have been either figured or named; Hübner's *ochreola*, fig. 96, and his *luteola* (Beiträge, i, pt. 3,